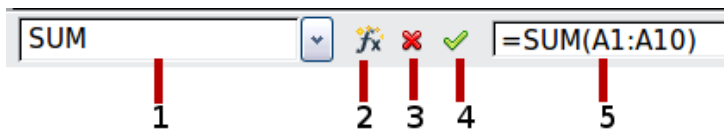


calculated by a simpler function call or arithmetic operation and then combined following the rules of calculation. It is possible to visualize each parsed element of the formula and check if the intermediate results are correct, until the mistake is found.

Functions can be entered into the Input line. After you enter a function on the Input line, press the *Enter* key or click the **Accept** button on the Formula Bar to add the function to the cell and get its result.



- | | |
|---|---|
| 1 | Name Box showing list of common functions |
| 2 | Function Wizard |
| 3 | Cancel |
| 4 | Accept |
| 5 | Input line |

Figure 235: The Formula Bar

If you see the formula in the cell instead of the result, then **Formulas** is selected in the *Display* section of the **Tools > Options > LibreOffice Calc > View** dialog. Deselect **Formulas**, and the result will display. However, you can still see the formula in the Input line.

Tip

The menu option **View > Show Formula** and the Windows / Linux shortcut *Ctrl+`* (grave accent) also toggle formulas on / off.

Array formulas

What is an array formula?

A formula in which the individual values in a cell range are evaluated is referred to as an array formula. The difference between an array formula and other formulas is that the array formula deals with several values simultaneously instead of just one.

Not only can an array formula process several values, but it can also return several values. The results of an array formula is also an array.

When Calc updates the formulas, each affected cell is read and its formula is recalculated. If you have a thousand cells in a column with the same formula (the formula expression only changes the data to compute), you end with one thousand identical formulas to interpret and execute.

Array formulas will evaluate the formula once and execute calculations as many time as the size of the array, thus saving the time used to interpret each cell formula. And because Calc stores only one formula for the entire array of data cells, it also save space in the spreadsheet file.

E1							
	A	B	C	D	E	F	G
1	1	2	3		10	20	30
2	2	3	4		20	30	40
3	3	4	5		30	40	50
4	4	5	6		40	50	60
5	5	6	7		50	60	70
6							
7							

Figure 236: Source array in yellow and resulting array in green. The array formula is shown in the Formula Bar

To multiply the values in the individual cells by 10 in the above array (Figure 236), you do not need to apply a formula to each individual cell or value. Instead you just need to use a single array formula. Select a range of 3 x 5 cells on another part of the spreadsheet, enter the formula